R E P O R T R E S U M E S

ED 014 099 CG 000 832

INSTITUTIONAL DIFFERENCES AND STUDENT CHARACTERISTICS.

BY- CHICKERING, ARTHUR W.

PUB DATE 3 MAY 66

EDRS PRICE MF-$0.25 HC-$0.84 19P.

DESCRIPTORS- *STUDENT COLLEGE RELATIONSHIP, COLLEGES, *STUDENT CHARACTERISTICS, *INSTITUTIONAL ENVIRONMENT, *RESEARCH PROJECTS, COLLEGE CURRICULUM, REPORTS, OMNIBUS PERSONALITY INVENTORY, GUIDE FOR COLLEGE VISITS AND REPORTING

A COMPARISON OF THE CHARACTERISTICS OF 13 COLLEGES SHOWS THAT THESE DIMENSIONS ARE IMPORTANT--CURRICULUM ORGANIZATION, RELIGIOUS EMPHASIS, PATTERNS OF REGULATION AND SUPERVISION, STUDENT FACULTY RELATIONSHIPS, AND SENSE OF COMMUNITY AND INSTITUTIONAL OBJECTIVES. THE GUIDE FOR COLLEGE VISITS AND REPORTING WAS USED FOR DATA COLLECTION. A DESCRIPTION OF THE VARIOUS COLLEGE DIFFERENCES WITHIN EACH DIMENSION, AND A CLUSTER ANALYSIS OF THE DIMENSIONS OF DIVERSITY FOR ALL THE COLLEGES ARE PRESENTED. ALL STUDENTS ENTERING THE 13 COLLEGES IN 1965 COMPLETED THE OMNIBUS PERSONALITY INVENTORY. THERE ARE SHARP AND SIGNIFICANT DIFFERENCES IN THE CHARACTERISTICS OF STUDENTS. AN EXAMINATION OF THE RELATIONSHIPS BETWEEN INSTITUTIONAL CHARACTERISTICS AND STUDENT PERSONALITY ILLUSTRATES A HIGH DEGREE OF CONGRUENCE. MAJOR QUESTIONS RAISED BY PROJECT RESULTS CENTER ABOUT THE RELATIONSHIPS BETWEEN THE PATTERNS OF CURRICULUM ORGANIZATION AND THE DEVELOPMENT OF MENTAL HEALTH, IMPLICATIONS FOR THE DEVELOPMENT OF MENTAL HEALTH WHEN CHARACTERISTICS OF STUDENTS AND FACULTY MEMBERS ARE SIMILAR, AND IMPLICATIONS FOR MENTAL HEALTH OF THE RELATIONSHIPS BETWEEN INDIVIDUAL STUDENT BEHAVIOR AND INSTITUTIONAL REGULATION AND SUPERVISION. THIS PAPER WAS PREPARED FOR THE ANNUAL MEETING OF THE MENTAL HEALTH SECTION OF THE AMERICAN COLLEGE HEALTH ASSOCIATION, MAY 3, 1966. (PS)

ED014099

Institutional Differences and Student Characteristics[1].

Arthur W. Chickering
Project on Student Development[2].
Plainfield, Vt.

The Project on Student Development is a four year study of student change in thirteen colleges, all with enrollments of less than 1500. The participating institutions are Bryan College, in Tennessee, Earlham, in Indiana, Eastern Mennonite, in Virginia, Goddard, in Vermont, Malone, in Ohio, Messiah, in Pennsylvania, Morris, in South Carolina, Nasson, in Maine, Sacred Heart, in Kansas, Salem, in West Virginia, Shimer in Illinois, Western New England, in Massachusetts, and Westmont, in California.

Institutional Differences

While there are similarities among some of the colleges, each college is, in significant ways, different from the other twelve. But five dimensions of difference seem to be of major importance: the patterns of curriculum organization, the religious emphasis, the patterns of regulation and supervision, student-faculty relationships and sense of community, and institutional objectives.

Before commenting on these variables let me describe the basis for the observations. The major source of information comes from two or three day visits to each campus by a team of three, two from the project staff and one from the Commission on Experimentation and Research of the Council for the Advancement of Small Colleges. On these visits team members talk with faculty, administration, and students, visit classes and other meetings, and generally see as much of each institution as possible during the allotted time. A Guide for College Visits and Reporting provides a common framework for interviews, observation, and recording, and each team member is asked to complete this Guide as fully as possible, so three fairly independent and overlapping reports are generated, which cover all the major aspects of the college program and environment. Thus, with the exception of the institutional goals, the descriptions of differences among the colleges rest on these reports from visiting the campuses, supplemented by the literature each college provided about itself. The relationships among the institutions described here therefore, except for differences in objectives, result from intuitive judgements based on this information and not on numeric or statistical analyses.

Diversity in patterns of curricular organization and in religious orientation and emphasis was to be expected because the institutions were selected with this intent. The other dimensions of diversity apparently come along with these two variables. Essentially the task of the Project is to discover what the significant differences are and to examine their relevance for patterns of attrition and student development.

---

1. Prepared for the annual meeting of the Mental Health Section of the American College Health Association, May 3, 1966.
2. Funded by the National Institute of Mental Health, MHO-1929-01.

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

CG 000 832

Patterns of Curriculum Organization

Ten of the Project Colleges conform quite closely to the standard undergraduate liberal arts curriculum. That is to say, the organization of course requirements, the content of courses, and the procedures for evaluation basically conform to those found in practically every college catalog one might pick at random off the shelf. Distribution requirements assure that each student takes at least one or two courses in the humanities, natural sciences and social sciences. Evaluation is through quizes, mid-terms, finals, and papers. And the course content is fairly predictable.

At some of these colleges there are variations within this standard theme however. At colleges with strong church ties Bible courses are required for up to sixteen hours of credit. Until recently, post-college employment opportunities for the Negro graduates of Morris College were limited to teaching and the ministry, and therefore their liberal arts program has developed within that context. At Morris there is also experimentation with the freshman English courses, and with remedial work in reading and speech. Sacred Heart has developed one interdisciplinary course bringing together history and the humanities, has another ready to begin soon, and is seeking support to extend this approach to other areas. At Westmont College team teaching in history is working well and being tested in other areas, opportunities for independent study have been opened up to senior students and may start to filter down to lower grade levels, and the psychology department has developed an entirely original sequence of courses and off-campus activities which allow on-campus learning to be intimately related to significant participation by students in a local mental hospital and in research on and off campus. Earlham enables independent study for upper division students, and offers interdepartmental courses and fields of concentration. Independent research supported by a $600 stipend is also possible for thirty students during the summer. Foreign programs and other off-campus study opportunities at centers in Washington and New York, and at the Hoover Institute at Stanford and the Merrill Palmer Institute in Detroit are also available.

Three of the Project Colleges differ fairly sharply from the standard pattern. Western New England differs because it is primarily training students in either business or engineering. The general studies component is strong, and a distinct liberal arts unit is underway, but currently a student's program is determined clearly and in detail by whether he majors in business management or engineering. Thus Western New England differs primarily in the content of its curricula.

Shimer and Goddard are both distinct from the rest of the Project Colleges and distinct from each other. Shimer has developed a highly structured and tightly integrated curriculum which places explicit emphasis on developing intellectual skills in analysis, rhetoric, logic, and integration, and on developing a comprehensive background of basic information. Classes are primarily intense small group discussions of limited reading materials frequently prepared in mimeographed form by the staff responsible for the particular course or sequence. Evaluation is by comprehensive examinations in

humanities, natural sciences and social sciences, and by integrative examinations in foreign language, history, and philosophy. Figure 1, taken from the Shimer catalog, portrays the general pattern, and reveals that at least one faculty member developed some kind of skill to a high degree. Notice that Nat. Sci. IV and Hum. III go down for a pass while Soc. Sci. II follows Math I in a fake line plunge over right guard.

[Insert Figure 1 about here]

Goddard's student-centered and highly flexible curriculum is in direct contrast to that of Shimer. There are no required courses and independent study is open to all students from the second year onward. Students are expected to undertake three studies each semester but may carry only two if the nature of the studies warrants it. Independent study may be pursued singly, or with one or more other students who share similar interests and who can agree on a plan of work for the semester satisfactory to themselves and to whatever teacher will work with them. Courses arise out of the interests of the students and the interests and capabilities of the teachers. Three days is usually given to registration during which students confer with teachers and with counselors about courses and about prospective independent studies. During the first three weeks of the semester course changes can be made with ease, and planning of independent studies may be carried forward.

The usual system of examinations and grades is replaced by a system of written self-evaluations and instructor comments and the last four or five days of each semester is given to final conferences with teachers and counselors about the work of the term. Figure 2 portrays the last faculty member who attempted to diagram the Goddard curriculum.

[Insert Figure 2 about here]

Table 1 indicates in rough fashion the relative positions of the Project Colleges visited so far with respect to religious orientation, regulation and supervision, and student-faculty relationships and sense of the college as a community. Definition of some points on these continua will help clarify the meaning of the different locations.

[Insert Table 1 about here]

Religious Orientation and Emphasis

Eastern Mennonite, Messiah, Bryan, and Westmont all require daily chapel attendance, and twelve to sixteen credit hours in religion, theology and Bible studies. Faculty members must sign a statement indicating adherence to a religious creed as a condition of employment. Prayer meetings are part of the week's routine. At Eastern Mennonite for example frequent prayer meetingsamong girls in the dorm are reported, "usually one big dorm prayer meeting per week, one small group (5-7) meeting per week, and one off-dorm

prayer meeting per week." At Westmont, "Prayer meeting, held once a week, lasts about an hour, is student planned, organized and operated, and was attended by roughly seventy five students of both sexes. Hymn singing was followed by prayer and testimonials, then by more prayer to end the meeting. Attendance was voluntary and was taken seriously." About Bryan, a team member reports, "The extent to which the religious convictions of the Bryan community permeate its life is revealed by the frequency of references to its theology and religious beliefs in conversations with students and faculty and by the practice of opening each class with prayer or readings from the Bible."

Salem and Earlham occupy locations toward the middle of the continuum. At Salem, attendance is required at a "convocation period" three times a week, one of which is devoted to "worship services with sacred music and inspirational talks", and there is a Religious Emphasis Week "to focus the thoughts of the entire student body and faculty on the significance of religion and its contribution to the life of the individual." However, only four hours of "religious courses" are required for graduation.

At Earlham, the Stout Memorial Meeting House with its Quiet Room open at all times for meditation and prayer, and comments in the catalog and by members of administration, faculty, and students make clear the Quaker orientation. Graduation requirements may be fulfilled by six hours of study in either philosophy or religion. At both Salem and Earlham, while a significant portion of the faculty share the respective religious background, there is diversity of belief and religious orientation is not a major criterion for employment.

At Goddard and Western New England, representing what conservative friends call the "heathen" end of the continuum, there is no chapel on campus and no plan to have one. Nor is there expectation or requirement concerning religious study as prerequisite to graduation. In the literature of the institutions and in the conversation of administrators, faculty and students no mention is made of religious philosophy or belief. At Goddard there is much talk about values, attitudes, morality, and socially responsible behavior, but the basis is clearly humanistic rather than theological. Thus the Project Colleges run the gamut from strong emphasis on religious belief and commitment in the context of conservative, fundamentalistic or evangelical traditions through more moderate emphasis in the context of Catholic or more liberal religious views, to complete absence of the religious or theological component as such.

Regulation and Supervision

There is similar diversity with regard to regulation and supervision of students and the relative positions of the colleges are similar. At Messiah, Bryan, and Eastern Mennonite regulations are numerous and supervision is close. Roughly ten to twenty pages of the student handbooks are given to spelling out standards, expectations, and consequences with regard to behavior on and off campus and in the residence halls.

The most important of these regulations rest on the religious beliefs, thus Eastern Mennonite "Protests: engaging in activities on Sunday which are not in harmony with the spirit of the Lord's Day; attending theatres, movies, poolrooms or similar places of amusements; the use of playing cards; music and radio programs not in keeping with Christian principles; spending excessive time in games and other recreational pursuits."

Messiah College says this about dress: "For Men Students: For classes, sport clothes (slacks, sweaters, and sport jackets) are usually worn. Coats are expected for the evening dinner except during extremely hot weather. For recreation areas men may wear T-shirts and shorts. Shorts are not permitted for general campus wear. For Women Students: Standards of modesty, femininity, good taste and neatness are expected of all. Women students are expected to avoid the excesses of modern fashions and tight-fitting apparel. Dresses and evening wear must have a minimum of capped sleeves. Sleeveless dresses, low necklines, open backs, and excessively short or tight skirts are not in keeping with the above principles. For classes, dresses, skirts and blouses are worn. Hose are expected for the evening dinner except during extremely hot weather." About socializing between the sexes Messiah says, "Couples spending an inordinate amount of time together on or off campus will be given counseling or discipline. Freshmen should refrain from socializing before 3:30 P.M. Monday through Friday."

Bryan College spells out expected dining room behavior in detail. For example: "Please refrain from talking with those who are serving you....All requests, such as asking for another napkin, etc. are to be given to the hostess, who will give them to the waitress serving that table....Playing with dishes, flipping water with your spoon and tearing doilies are all childish traits, and may not be tolerated....When you have completed the meal, place your knife and fork in the center of the plate, side by side with handles on the outer edge. Do not merely place them on the edge of the plate....Please do not hang your arms over the back of the chair at any time during the meal. At no time should you lean on the table while eating.... Do not chew with your mouth open....Hold your knife and fork in the proper manner....Do not dunk."

Supervision of student behavior rests with authorized persons; adults living in the dormitories, student assistants living on each dormitory floor, and Deans of Men and Women who in some cases also have student assistants. Consequences for misbehavior rest with the Deans, although pre-established monetary fines or other punishments are associated with some infractions, and in severe cases action usually rests with a faculty committee. Student judiciary committees operate to a limited extent.

Obviously, not all the rules and expectations are seen as equally important nor are infractions treated with equal severity. Many are more statements of expectation than strict regulations. They are mentioned however, to communicate a basic principle and a basic assumption on which these colleges seem to operate, (a) the principle that students should be told in

writing just what they are to do and what they are not to do, that the more things are spelled out the better, that no area should go unmentioned, and (b) that extensive regulation and close supervision fosters the development of responsible behavior.

At Goddard by contrast the rules are few and fuzzy. According to one reporter there are four: "(1) No unmannerly drinking, this is not explicitly defined. (2) No drinking under 21. (3) Limitation on inter-dorm visitation. (4) Sign out at switchboard when leaving campus." The College Regulations section of the mimeographed document provided for students indicates that during the fall semester 1965, members of the opposite sex are permitted in the sleeping quarters of student residences from 4:00 to 10:00 P.M. on weekdays, and 2:00 to 10:00 P.M. on Sundays. Each house must be closed one day, and within these limits each house may set its own hours. The College regulation with regard to dress is, "Appropriate standards of personal appearance are expected of community members at all times both on and off campus."

There are neither faculty supervisors nor student assistants in the residence halls. Students are expected to manage their own affairs, and all students are expected to assume responsibility for their fellow students and for the welfare of the community. Commenting about handling of offenders a team member said, "There is a social standards committee which is also a fact finding committee--ninety percent of their energy has to do with inter-dorm visitation violation (students in sleeping quarters of opposite sex outside prescribed hours). There is no enforcement machinery. When asked who they have to back up regulations answered: 'We have Forest Davis (Dean), he knows everything, almost.' Last year Forest Davis asked a student to leave."

It seems clear that at Goddard the operating principles and assumptions are the opposite of those at Bryan, Messiah, and Eastern Mennonite, namely (a) that expectations and standards for behavior should not be spelled out in writing, nor even hardly hinted at, and (b) that conditions of minimal regulation and limited supervision by adults or other authorized personnel foster the development of responsible behavior.

The other Project Colleges fall between these two poles. Westmont and Morris, while basically similar to Bryan, Messiah, and Eastern Mennonite in arrangements for supervision and enforcement, leave more unsaid and allow students somewhat greater freedom and self-determination. Shimer, Salem, and Western New England have the typical array of rules concerning gambling, drinking, smoking, dormitory curfews, late permissions, signing out, automobile use, and so forth. Earlham's rules and standards are not strikingly different but there is a strong honor code and considerable responsibility for implementation rests with the students.

It is worth noting that the issue of rules and student behavior seems to be most salient at both the colleges with numerous regulations and close supervision and at Goddard with conditions of great freedom. There is a

difference however. In the first instance there is a relatively large amount of energy expended on implementation and enforcement. At Goddard, on the other hand, most of the energy, and a good bit is expended, goes into discussing and debating the standards themselves, with relatively minor modifications sometimes resulting. At Earlham, Salem, and Sacred Heart by contrast, the existing structure of regulations seems to be accepted without much fuss and relatively little energy is expended in this area.

Student-Faculty Relationships and Sense of Community

To make judgements about student-faculty relationships and the extent to which there is a sense of the college as a community is risky business. Yet there seem to be clear differences from college to college.

About Western New England one reporter says, "The order of the day seemed to be a kind of standardized urban anonymity. Serious-faced young men...came and went singly, in pairs, or small groups, chatting pleasantly and easily in quiet tones. Beyond the immediate circle however, the other students were treated as strangers with the not unfriendly distance often accorded other people eating in a restaurant or traveling on a train. A number of faculty (at least 3) complained of the lethargy of the students, saying they seem to have no interests; they are commuters; their lives are lived away from the college. 'They come to class, take notes, go away.'

At Sacred Heart and Messiah the dominant impression is one of formality, distance, and respect. Students and faculty are acquainted and students obviously feel positively about the faculty and feel quite at ease with their teachers. But, with individual exceptions of course, banter, casual conversation, or other informal exchange is rarely observed.

At Morris and Westmont one is struck by a more relaxed atmosphere. Reporting on Morris a team member says, "One...senses a great deal of warmth and friendliness--a high regard by the faculty for students and the feeling among students that teachers are their friends." This warmth and friendliness seems stronger at Bryan, and begins to carry also a feeling of community or extended family: "One needs to be on campus only a short time to sense a strong community spirit characterized by warmth, concern for the college, and devotion to its religious principles. According to statements made by students...they place a high value on the friendliness of the faculty and their readiness to respond to personal requests for help, whether in studies or personal problems."

At Goddard and Shimer relationships of friendship and informality are relatively frequent, and there is a relatively strong sense of community. At Goddard students and faculty operate for the most part on a first name basis. Each student has a faculty counselor, usually of his own choice, and it is expected that individual conferences will be held every one or two weeks. In this context, as well as in the context of small classes, independent studies, and numerous joint student-faculty committees, close relationships of mutual regard develop. The sense of community is particularly

strong at Shimer, where certain attitudes and behaviors are clearly "Shimerian" and others clearly are not. Few members of the community can define precisely what it means to be "Shimerian", but in his heart everyone knows. As is the case at Goddard, and also at Bryan to a lesser extent, this sense of community seems to derive primarily from a wide range of informal, inexplicit, and frequently unidentified agreements and understandings that are only learned through living as a member of the community.

Institutional Objectives

As is to be expected, all these differences are accompanied by, or more properly, perhaps result from, variation in institutional objectives. The data presented below come from a College Goals Rating Sheet completed by members of the faculty and administration of each college. This sheet lists twenty-five characteristics of graduates and the respondent is asked to represent the objectives of his institution by indicating the two most desirable and two least desirable characteristics, and the five next most desirable and least desirable, leaving eleven characteristics remaining rated in the middle. Table 2 presents the five most desired and five least desired characteristics when all respondents within each institution are pooled.

[Insert Table 2 about here]

Four basic patterns emerge, labeled Christ-Centered, Intellectual-Social, Personal-Social, and Professional-Vocational. In the Christ-Centered cluster, the colleges are remarkably similar not only in the characteristics they rank most desired, but in those ranked least desired. Whenever an item has an explicit religious reference it was ranked high at Bryan, Eastern Mennonite, Messiah, and Westmont. Thus the five such items among the twenty-five choices are ranked highest. Malone and Sacred Heart follow a somewhat similar pattern, except that the item "Capable of effective judgement based on sound analysis of relevant information", and items concerning responsible citizenship without religious reference were ranked high with sufficient frequency to displace items mentioning Christ and God.

It should be noted that faculty and administrators at the Christ-Centered colleges may see the intellectual, social, and professional-vocational dimensions of the other patterns to be expressed within the five items they ranked highest. Indeed one of the questions still most unclear is just how the graduate who is committed to Christ differs from the secular graduate who is strongly committed to a similar value system which has a humanistic basis. Like the sense of community, the difference has real meaning for the faculty and for many of the students at these colleges, but clear communication of that difference to someone outside the community seems very difficult to achieve.

Colleges with patterns other than the Christ-Centered consistently rank as least desirable some of the items with religious referents, most commonly, "Committed to Christ" and "Guided by God's Will". These colleges share with

the Christ-Centered, the frequent assignment of "Chooses friends carefully," and "Mixes easily but chooses friends carefully" to the least desirable category. Thus these two items did not contribute much to the discriminative power of the instrument.

Earlham and Shimer rank highest characteristics reflecting intellectual ability, breadth of information, and social responsibility. Shimer replaces one item concerning social responsibility with one concerning increased self-understanding.

Goddard's desired characteristics are predominantly related to personal development and responsible citizenship, with one item reflecting development of intellectual competence. No items concerning information or breadth of knowledge are ranked among the top five.

At Western New England and Morris, the emphasis on professional and vocational preparation is reflected along with concern for intellectual competence. At Morris, "Constructive and creative member of interdependent society" is displaced by "Aware of broad cultural foundations of our society."

If five major dimensions of diversity are examined together for all the colleges, four clusters emerge. The colleges with the strong emphasis on a conservative religious orientation tend to express their objectives in highly similar fashion and to have the same assumptions and practices with regard to student regulation and supervision. They also, with the exception of Westmont and perhaps Sacred Heart, depart least from the standard curricular arrangements. Goddard and Shimer also tend to vary together at the other end of the spectrum, although not so closely. Earlham and Sacred Heart consistently occupy the middle range. Western New England, Morris, and Salem seem to have more individual patterns. As we turn to examination of the characteristics of the entering students we shall see whether these collegiate relationships tend to persist.

Student Characteristics

All students entering the thirteen project colleges in fall 1965 completed the Omnibus Personality Inventory along with several other questionnaires and inventories. These comments are based on the OPI results which are presented for five factors and four scales. The Practical Outlook, Intellectual-Esthetic, and Intellectual-Scientific factors have been grouped together in Table 3, labeled Intellectual Orientation. The Impulsive-Innovation factor and the Altruism and Religious Orientation scales have been grouped together in Table 4, labeled Social-Religious Orientation. Integration and Anxiety factor, and the Extroversion and Response Bias scales have been grouped together in Table 5, labeled Personal Orientation.

Most variation among the colleges occurredwith respect to Intellectual Orientation and Social-Religious Orientation, with little variation among the measures labeled Personal Orientation. When these factor and scale scores

for the students entering the thirteen different Project colleges were compared, three major patterns accounted for ten of the institutions, and three colleges were sufficiently different from the major patterns and from each other, as to be unique. The three major patterns have been called the Intellectual Altruists, the Practical Conservatives, and the Altruistic Conservatives, and are described briefly in that order.

Intellectual Altruists

Intellectual Altruists are the mode at Goddard, Shimer, and Earlham. Students entering these institutions show diverse interests in artistic matters and activities, and appreciation for literature, music, and dramatics. They are characterized by a liking for reflective thought and academic activities, and their thinking is relatively free from domination by objective conditions and generally accepted ideas. They are also interested in science and are generally logical, analytical, and critical in their approach to problems. They admit to sensitivity and emotionality.

These students are generally ready to express impulses and to seek gratification either in conscious thought or in overt action. They have an active imagination and value sensual reactions. They are experimentally oriented and fond of novel situations and ideas. They are tolerant of ambiguities and prefer to deal with diversity and complexity as opposed to simplicity and structure. They exhibit concern for the feelings and welfare of others and are trusting in relationships with them. They are skeptical of conventional religious beliefs and practices and especially reject those that are orthodox or fundamentalistic in nature.

Practical Conservatives

The Practical Conservatives predominate at Bryan, Messiah, Sacred Heart, and Salem. They show a pattern opposite that of the Intellectual Altruists; when the Intellectual Altruists score low the Practical Conservatives score high and vice versa. Thus the Practical Conservatives are interested in practical applied activities and tend to value material possessions and concrete accomplishments. They are characterized by authoritarianism, conservatism and non-intellectual interests and show a preference for overt action. They tend to deny interest in esthetic matters and to evaluate ideas on the basis of their practical immediate application.

Compared with the Intellectual Altruists they are less concerned about the welfare of others and view people from a more impersonal and distant perspective. They have a strong religious commitment and ascribe to conservative, evangelical or fundamentalistic religious beliefs.

Altruistic Conservatives

The third pattern, the Altruistic Conservatives, typified students entering Eastern Mennonite, Westmont and Malone. These students share with the Intellectual Altruists a relatively strong concern for the welfare of

others and a trust in others. In the intensity of their intellectual interests they fall generally between the Practical Conservatives and the Intellectuals. They share with the Practical Conservatives a disinclination to gratify impulses through overt thought or action and a rather fixed way of viewing things which leads to a non-experimental orientation, a preference for what is known and has been tried over that which is novel. The Altruistic Conservative also shares with the Practical Conservative a strong religious commitment and general adherence to conservative and evangelical religious beliefs.

Thus, the Altruistic Conservative differs from the Practical Conservative primarily in terms of his high level of social concern and sensitivity to the welfare of others, and he differs from the Intellectual Altruists primarily in his religious orientation, his hesitancy with regard to the expression of his own impulses, and his wariness of the new or experimental.

These three major patterns account pretty well for the OPI characteristics which most sharply differentiate among entering students at ten of the thirteen Project colleges. Three colleges, Nasson, Morris, and Western New England, present unique configurations. Nasson students are unique in the consistency with which they stay close to the mean. In only one instance do they deviate more than one half standard deviation from the mean for the norms group, and the small variations which do occur have no apparent systematic relationship with any of the patterns so far observed. Morris College entrants are unique in combining a very strong practical orientation with moderate levels of intellectual interests. This combination is accompanied by low concern for the feelings and welfare of others. They are also characterized by moderate conservatism in religious orientation as well as some hesitancy with respect to impulse expression and experimentation. Western New England College entrants, all men aspiring to either business or engineering, are unique in reflecting much stronger intellectual interest in the scientific realm, than in the esthetic or humanistic. At all the other Project colleges the level of intellectual interests tended to be fairly consistent across both these areas, but at Western New England this is not the case. Western New England students also reflect relatively little social concern or concern for the welfare of others and score close to the mean on measures of impulse expression, tendency toward innovation, and religious orientation.

There were three measures which reflected little difference among the Project colleges, Personal Integration, Extroversion, and Response Bias. The student scoring low on Personal Integration and Social Extroversion may often express hostility and aggression, and may reveal feelings of loneliness, rejection, and isolation. He intentionally avoids others and tends to withdraw from social contacts and responsibilities. The Response-Bias measure reflects the test taking attitude of the student, with high scorers responding in manner similar to students who were explicitly asked to make a good impression by their responses. On none of these three measures is the difference in mean score between the lowest and highest institution greater than seven points, or approximately two thirds of a standard deviation.

Thus, among the students entering these thirteen small colleges, intellectual orientations and social-religious orientations vary independently in relation to variables of personal integration and interpersonal relationships. This is to say, the systematic relationships among the intellectual and social-religious variables do not carry over into the areas tapped by measures of personal integration, anxiety level, extroversion, and response bias.

Sex Differences

These data can also be examined for insights concerning sex differences. The most noteworthy finding is that for all measures differences between sexes are smaller than differences between institutions. To put it differently, boys and girls at the same institution are more alike on these measures than either is like a person of the same sex at a different institution. Within this generalization however, it is also true that there is small but consistent difference between the sexes on some variables.

Except for one college, Shimer, girls consistently score slightly higher on the Intellectual-Esthetic factor and lower on the Intellectual-Scientific factor. This result is not only a function of the differential loading for the Masculinity-Femininity scale but also occurs because girls score consistently higher on the Estheticism and Thinking Introversion scales which tap interests in the arts and humanities, and lower on the Theoretical Orientation scale which taps interests in the sciences. In all Project colleges girls score lower on the Impulsive-Innovative factor and higher on the Altruism scale, and at all except Goddard and Shimer girls reflected a more conservative religious orientation than their male peers. Girls also consistently score slightly lower on Integration and Anxiety, presumably a reflection of somewhat less need to deny feelings of anxiety or worry.

While it is true that in no single instance would the sex differences reach statistical significance, the consistency with which the differences occur suggests clearly some value to be gained from further exploration. Although sex differences appear small when compared with institutional differences, it may well be that within a particular institution, recognition of some of these differences could enable substantial improvement of the college program.

Discussion

These data make obvious the fact that there are sharp and significant differences in the characteristics of students attending the different kinds of colleges participating in the Project. The processes that operated to sort the individuals into these different groups, to move these persons into these differing environments and social systems, certainly worked quite effectively. The relatively small standard deviations and the distances between the groups, indicates that there are few Practical Conservatives among the Intellectual Altruists and that the Intellectuals return the compliment. The Altruistic Conservatives also comprise a fairly distinct group, as do the patterns

unique to Morris, Nasson, and Western New England. It seems very likely that the student who fits one pattern would feel quite out of place at an institution where another pattern was dominant.

More particular examination of some of the relationships between institutional characteristics and student personality illustrates the high degree of congruence. As would be expected, students with the most conservative religious beliefs attend those colleges with a strong emphasis of that kind. Within this group the most altruistic students attend those church related colleges where service is emphasized. Students scoring highest on measures of intellectual interest seek out those colleges which vary most sharply from the traditional pattern, perhaps hoping for an improvement upon what they have so far experienced. Students who are most reluctant to express their impulses in conscious thought or overt action, attend those schools where regulations are most numerous and supervision most close.

What are the implications of these findings for the development of increased mental health in college and for conceptions concerning mental health? First, the conception of mental health as simply the absence of mental illness is clearly not a very useful one here, but this has been recognized for some time. Further however, conceiving of mental health as related to how well a person is functioning at a given point in time does not serve very well either. It seems clear that a student who is functioning effectively and well in the setting of one of these colleges might experience considerable upset and disequilibrium at another. But it would probably not be accurate to say that he was less healthy. The conception of mental health as the fullest use of one's potentials is a good one, but the limits of potential are not definable and therefore determination of where one stands in relation to them is difficult, except on occasions where obvious deterioration has occured.

Of course any attempt to define mental health is hazardous, but it is necessary if communication is to occur. The definition offered here is behavioral and operational; "the mental health of an individual is directly proportionate to the range of situations with which he can cope productively and from which he can gain satisfaction." Thus the sick person is he who has been unable to cope productively with, or to gain satisfaction from, the conditions of his existence sufficient to sustain himself. The healthiest person is he who can move through a wide range of conditions and situations without being seriously "bugged" by any of them. This is, perhaps, rather an "antibody" definition of mental health and that may be a weakness, but at this point it is helpful in thinking about the development of mental health among college students.

In the light of this definition the findings raise three major questions:

1. What are the relationships between patterns of curriculum organization and the development of mental health. It seems clear that the educational program most likely to foster development for one kind of student is unlikely to be useful for all the others. The course content, curricular

requirements, teaching styles, and student faculty relationships developmentally fruitful for one probably are not for the other.

2. What are the implications for the development of increased mental health where most students and faculty members are similar to each other in a variety of significant ways?

3. What are the implications for mental health when students most wary of their impulses attend institutions where behavior is most highly regulated and supervised? When students who are most tuned in to their impulses and most ready to express them attend an institution with minimal regulation and supervision?

There are no clear answers at hand, but it is to questions such as these that the Project on Student Development and future research concerning student development in college must be addressed.

Figure 1.

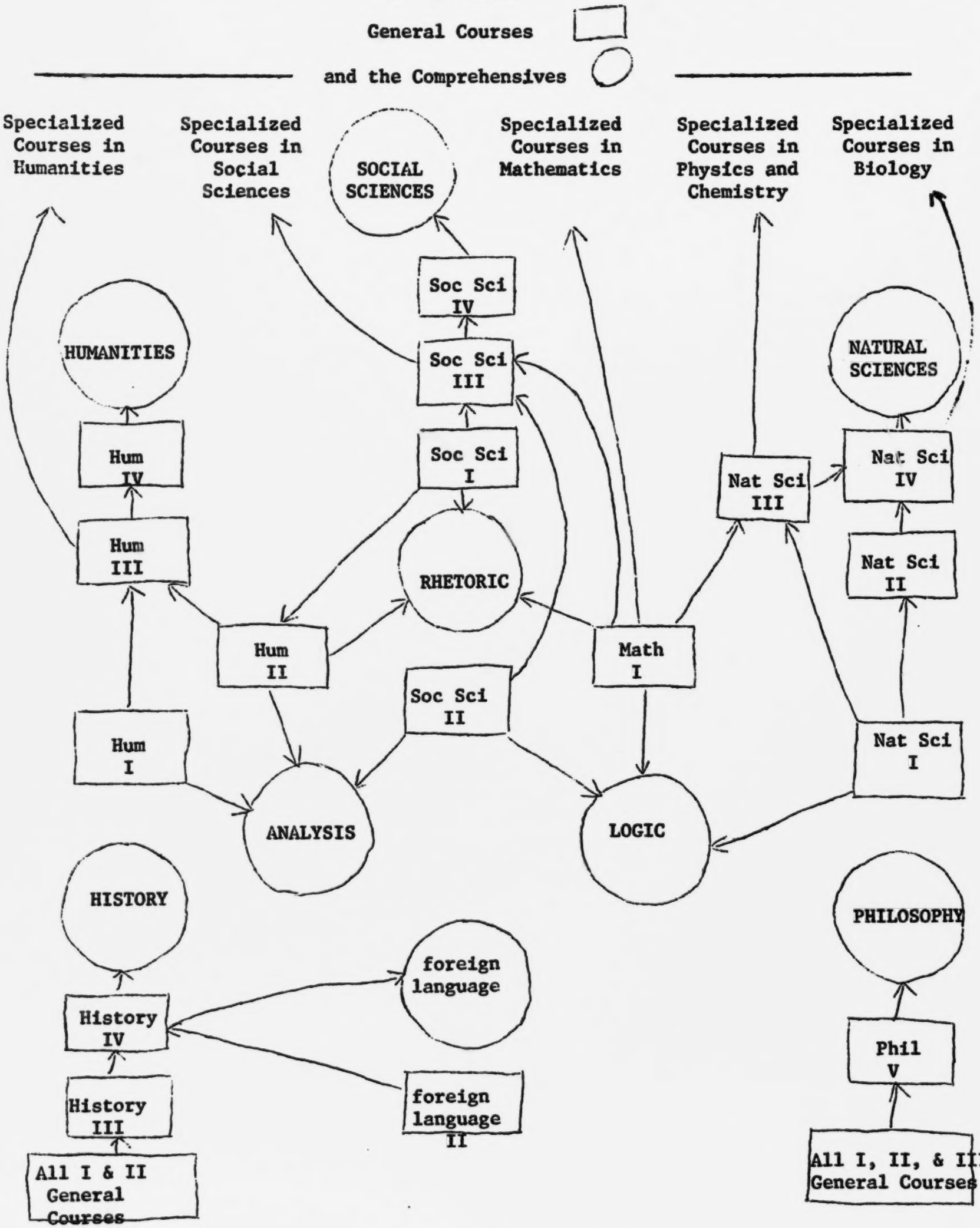
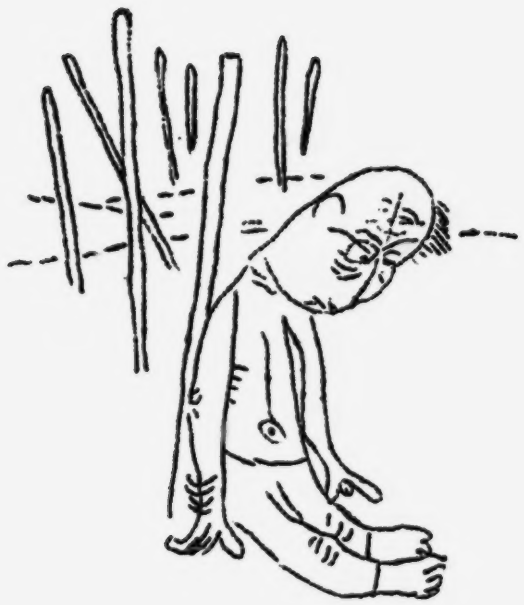

The Curriculum:
General Courses
and the Comprehensives
Specialized Courses in Humanities
Specialized Courses in Social Sciences
SOCIAL SCIENCES
Specialized Courses in Mathematics
Specialized Courses in Physics and Chemistry
Specialized Courses in Biology
HUMANITIES
Hum IV
Hum III
Hum II
Hum I
Soc Sci IV
Soc Sci III
Soc Sci I
Soc Sci II
RHETORIC
ANALYSIS
Math I
LOGIC
Nat Sci III
NATURAL SCIENCES
Nat Sci IV
Nat Sci II
Nat Sci I
HISTORY
History IV
History III
All I & II General Courses
foreign language
foreign language II
PHILOSOPHY
Phil V
All I, II, & III General Courses

Figure 2.



From W. Steig
"The Lonely Ones"

Table 1.
Relative Positions for
Religious Orientation, Regulation and Supervision,
Student-Faculty Relationships and Sense of Community

Religious Orientation	Regulation and Supervision	Stu-Fac. Relations and Comm.
Conservative- Strong Emphasis	Regulations - Close Numerous Supervision	Distant, Formal, Weak Sense of Community
Eastern Mennonite	Messiah	Western New England
Messiah	Bryan	Salem
Bryan	Eastern Mennonite	
Westmont	Westmont	
Morris	Morris	Sacred Heart
		Messiah
Sacred Heart	Sacred Heart	Earlham
Salem		Eastern Mennonite
	Western New England	
Earlham	Shimer	Morris
	Salem	Westmont
	Earlham	Bryan
Shimer		
Western New England		Goddard
Goddard	Goddard	Shimer
Liberal- No Emphasis	Few Regulations Limited Supervision	Close, Informal, Strong Community Sense

Table 2.
Patterns of Institutional Objectives
Expressed as Most and Least Desired Characteristics of Graduates

Pattern and College	Five Most Desired	Five Least Desired
Christ-Centered A.	Educated in the liberal arts within the context of a Christian World View Committed to Christ Guided by God's Will Activated by Christian ideals in the various pursuits of life Dedicated to Christian Service	Independent member of society Recognizes and accepts feelings as relevant to decisions Chooses friends carefully Educated in the traditional liberal arts Mixes easily but chooses friends carefully.
Bryan Messiah Eastern Mennonite Westmont		
Christ Centered B.		
Malone	Same as above except that "Dedicated to Christian service" gives way to "Capable of effective judgement based on sound analysis of relevant information."	
Sacred Heart	Same as above except that "Guided by God's will" gives way to "Capable of Effective judgement...""Socially responsible and participating citizen," and"Constructive and creative member of interdependent society", also were ranked high.	
Intellectual-Social		
Earlham	Capable of effective judgement based on sound analysis of relevant information Activated by the intellectual, cultural, moral, and spiritual values of our civilization Constructive and creative member of interdependent society Socially responsible and a participating citizen Educated in the liberal arts within the context of a Christian world view.	Chooses friends carefully Committed to Christ Guided by God's will Mixes easily but chooses friends carefully Independent member of society
Shimer	Same as Earlham except that "Socially responsible...", and "Educated in the liberal arts...world view" are replaced by "Has understanding of self as an individual and as a member of society", and "Aware of the broad cultural foundations of our society."; and "Independent member of society" is replaced by "Dedicated to Christian service and leadership"	

Table 2. Cont.

Pattern and College	Five Most Desired	Five Least Desired
Personal-Social		
Goddard	Has understanding of self as an individual and as a member of society Constructive and creative member of interdependent society Capable of effective judgement based on sound analysis of relevant information Able to recognize and develop own creative potentials Socially responsible and participating citizen	Committed to Christ Guided by God's will Dedicated to Christian service Educated in the liberal arts within the context of a Christian world view. Activated by Christian ideals in the various pursuits of life
Professional-Vocational		
Western New England	Prepared for future professional activities Possesses skills and abilities for future vocation Capable of effective judgement... Socially responsible and participating citizen Construction and creative member of interdependent society	Committed to Christ Guided by God's will Dedicated to Christian service Educated...within the context of a Christian world view. Chooses friends carefully
Morris	Same as above except that "Aware of broad cultural foundations of our society" replaces "Constructive and creative member of interdependent society"	Independent member of society Educated in the traditional liberal arts Guided by God's will Activated by personal value system relevant to own needs and social circumstances Chooses friends carefully